

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	1819853
<b>Application Number:</b>	10619796
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	7886
<b>Title of Invention:</b>	Sparse and efficient block factorization for interaction data
<b>First Named Inventor/Applicant Name:</b>	Francis X. Canning
<b>Customer Number:</b>	20995
<b>Filer:</b>	Lee W. Henderson/Glen Martell
<b>Filer Authorized By:</b>	Lee W. Henderson
<b>Attorney Docket Number:</b>	CANNING.001CP2
<b>Receipt Date:</b>	29-MAY-2007
<b>Filing Date:</b>	15-JUL-2003
<b>Time Stamp:</b>	22:26:00
<b>Application Type:</b>	Utility

### Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$180
RAM confirmation Number	11986
Deposit Account	

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part /.zip	Pages (if appl.)

1	Miscellaneous Incoming Letter	Transmittal_CANNING.pdf	59062	no	2
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**Warnings:**

**Information:**

2		Amendment_CANNING.pdf	614663	yes	14
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**Multipart Description/PDF files in .zip description**

	Document Description	Start	End
	Amendment After Final	1	1
	Claims	2	6
	Applicant Arguments/Remarks Made in an Amendment	7	14

**Warnings:**

**Information:**

3	Information Disclosure Statement (IDS) Filed	IDS_CANNING.pdf	175797	no	3
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**Warnings:**

**Information:**

This is not an USPTO supplied IDS fillable form

4	NPL Documents	NPL1_CANNING.pdf	181128	no	8
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**Warnings:**

**Information:**

5	NPL Documents	NPL2_CANNING.pdf	411345	no	8
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**Warnings:**

**Information:**

6	NPL Documents	NPL3_CANNING.pdf	5475158	no	20
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**Warnings:**

**Information:**

7	NPL Documents	NPL4_CANNING.pdf	470569	no	11
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**Warnings:**

**Information:**

8	NPL Documents	NPL5_CANNING.pdf	114824	no	4
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**Warnings:**

**Information:**

9	NPL Documents	NPL6_CANNING.pdf	147125	no	4
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**Warnings:**

**Information:**

10	NPL Documents	NPL7_CANNING.pdf	1310037	no	18
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**Warnings:**

**Information:**

11	NPL Documents	NPL8_CANNING.pdf	235332	no	4
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**Warnings:**

**Information:**

12	NPL Documents	NPL9_CANNING.pdf	8321643	no	21
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**Warnings:**

**Information:**

13	NPL Documents	NPL10_CANNING.pdf	120188	no	4
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**Warnings:**

**Information:**

14	NPL Documents	NPL11_CANNING.pdf	6281590	no	19
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**Warnings:**

**Information:**

15	NPL Documents	NPL12_CANNING.pdf	831103	no	20
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**Warnings:**

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16	NPL Documents	NPL13_CANNING.pdf	3829105	no	15
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**Warnings:**

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17	NPL Documents	NPL14_CANNING.pdf	233593	no	7
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**Warnings:**

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18	NPL Documents	NPL15_CANNING.pdf	72930	no	2
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**Warnings:**

**Information:**

19	NPL Documents	NPL16_CANNING.pdf	90734	no	2
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**Warnings:**

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20	NPL Documents	NPL17_CANNING.pdf	97777	no	3
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**Warnings:**

**Information:**

21	NPL Documents	NPL18_CANNING.pdf	1108479	no	21
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**Warnings:**

**Information:**

22	NPL Documents	NPL19_CANNING.pdf	2785699	no	28
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**Warnings:**

**Information:**

23	NPL Documents	NPL20_CANNING.pdf	9787374	no	108
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**Warnings:**

**Information:**

24	NPL Documents	NPL21_CANNING.pdf	2760393	no	52
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**Warnings:**

**Information:**

25	NPL Documents	NPL22_CANNING.pdf	3804863	no	44
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**Warnings:**

**Information:**

26	NPL Documents	NPL23_CANNING.pdf	2263861	no	64
<b>Warnings:</b>					
<b>Information:</b>					
27	NPL Documents	NPL24_CANNING.pdf	2911844	no	70
<b>Warnings:</b>					
<b>Information:</b>					
28	NPL Documents	NPL25_CANNING.pdf	706850	no	14
<b>Warnings:</b>					
<b>Information:</b>					
29	NPL Documents	NPL26_CANNING.pdf	707018	no	14
<b>Warnings:</b>					
<b>Information:</b>					
30	NPL Documents	NPL27_CANNING.pdf	6377672	no	23
<b>Warnings:</b>					
<b>Information:</b>					
31	Fee Worksheet (PTO-06)	fee-info.pdf	8185	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>				62295941	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.